

COMPILER GENERATION OF INSTRUCTION SEQUENCES FOR UNRESOLVED STORAGE REFERENCES

ABSTRACT OF THE DISCLOSURE

5 A compiler component for the generation of an optimal instruction sequence, the sequence
including a compile-time unresolved reference to be resolved at runtime. The compiler
generating a snippet list with entries corresponding to snippets defined for instructions including
unresolved compile-time references. A runtime helper routine being defined for resolving
references at runtime. For each instruction with an unresolved reference, generating a snippet
including data for identifying the reference and for permitting resolution of the reference at
runtime by the runtime helper routine. The snippet also including a copy of the instruction
containing the unresolved reference. The location in the compiled code for the unresolved
instruction being written with a call instruction to the snippet. The runtime helper being invoked
by the snippet at runtime to resolve the references and to copy the unresolved code copy to the
compiled code, with the references resolved.